

REMARKS

Claims 1-50 and 52-54 are pending in the application. Claim 44 is cancelled herein. While Applicant disagrees with the current rejections, Applicant has cancelled Claim 44 to expedite prosecution. Applicants reserve the right to pursue Claim 44 as originally filed in one or more continuing applications. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 112

Claim 44 stands rejected under 35 U.S.C. § 112, second paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

Claim 44 is cancelled herein. Reconsideration and withdrawal of this rejection are respectfully requested.

I. REJECTION OF CLAIMS 1-30 AND 40-42 UNDER 35 U.S.C. § 103

Claims 1-30 and 40-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art (APA) in view of U.S. Pat. No. 6,456,590 ("Ren") and U.S. Pub. No. 2004/0076194 ("Okamoto").

Claim 1 recites n counters that selectively increment a count based on when a respective ingress module enqueues a buffer to a destination channel.

A. APA Fails to Disclose the n Counters recited in claim 1

The Examiner acknowledges that APA fails to disclose the claimed counters and relies on the combination of Ren and Okamoto for such disclosure.

B. Ren and Okamoto Fail to Disclose the n Counters recited in claim 1

The Examiner alleges that Ren teaches incrementing a counter if a channel receives a frame. The Examiner admits that the counters of Ren are different than the counters recited in Claim 1 because the counters of Ren are incremented when a frame is received and not when an ingress module enqueues a buffer to a destination channel. This distinction is important because the counters of Ren do not represent memory usage for several reasons.

For example, not all received frames of a network switching device are stored in memory. Some frames are dropped for policy reasons. Thus, although a frame is received, a buffer may not be enqueued. Also, the size of a buffer may not match the size of the received frame. Thus, unfilled memory may be allocated to a channel. As another example, the bytes associated with allocated buffers (memory usage) may be different than the number of bytes of a frame. Thus, actual memory usage, as associated with a frame, may be greater than the size of the frame.

The Examiner alleges that Okamoto discloses using a counter to track the number of buffers of a memory that are allocated. The Examiner refers to paragraph [0451] of Okamoto. As best understood by Applicant, in paragraph [0451], Okamoto discloses a packet buffer counter that counts the number of bytes of data written in an allocated buffer cell. Okamoto does not count the number of buffers of a memory that are allocated or enqueued. In Okamoto, the number of bytes written in a buffer cell is counted to detect when a particular portion of a packet is written. A count of the number of bytes written in a buffer cell does not indicate the number of buffers used. Thus, Okamoto does not disclose a counter that is incremented when a buffer is enqueued.

The counters of Claim 1 are incremented when a buffer is allocated, not when a frame is received or when a byte is written in a buffer cell. For at least this reason, the counters recited in Claim 1 track the actual amount of memory usage. This feature is not provided by the techniques of Ren and/or Okamoto.

C. The claim has limitations not taught by the references

With respect to Claim 1, APA, Ren and Okamoto also fail to at least show, teach or suggest egress modules that exercise flow control on a respective channel when a count, as recited in Claim 1, is greater than a pause threshold. Since APA, Ren and Okamoto fail to disclose the claimed incrementing, APA, Ren and Okamoto also fail to disclose flow control based on values of the claimed counters.

It is a longstanding rule that to establish a prima facie case of obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 143 (CCPA 1974), see MPEP §2143.03.

Therefore, Claim 1 is allowable for at least the above reasons. Claims 13 and 23 are allowable for at least similar reasons as Claim 1. Claims 2-12, 14-22, 24-30, 39-50 and 52-54 ultimately depend from Claims 1, 13 and 23 and are allowable for at least similar reasons.

II. REJECTION OF CLAIMS 31-38 UNDER 35 U.S.C. § 103

Claims 31-38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of Ren and Langberg et al. (U.S. Pat. No. 5,852,630). These rejections are respectfully traversed.

Claim 31 recites incrementing a count when a buffer is enqueued and causing flow control on a channel when the count is greater than a pause threshold.

A. APA, Ren, and Landberg Fail To Disclose Incrementing a Count When a Buffer is Enqueued

The Examiner admits that APA and Ren do not disclose incrementing a count when a buffer is enqueued. Applicant submits that this feature is also not disclosed in Langberg. As best understood by Applicant, Landberg is directed to an activation procedure for a rate adaptive digital subscriber line. Landberg does not disclose a counter, incrementing of a counter, and/or incrementing of a counter when a buffer is enqueued.

This deficiency was by APA, Ren and Landberg was asserted by the Applicant in the Response of September 11, 2008. This deficiency by APA, Ren and Langberg was not addressed by the Examiner in the Final Office Action.

Therefore, Claim 31 is allowable for at least the above reasons. Claims 32-38 ultimately depend from Claim 31 and are allowable for at least similar reasons.

ALLOWABLE SUBJECT MATTER

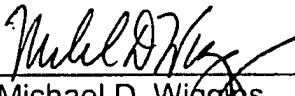
The Examiner states that Claims 45-46 and 53-54 would be allowable if rewritten in independent form. Applicant reserves the right to amend the claims into their originally allowable form at a later date if needed.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, addressed, or rendered moot, and that the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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